

## Refine Search

### Search Results -

Terms	Documents
L12 and (epinephrine or adrenaline)	29

#### Database:

US Pre-Grant Publication Full-Text Database  
US Patents Full-Text Database  
US OCR Full-Text Database  
EPO Abstracts Database  
JPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

#### Search:

L14

Refine Search

Recall Text

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Interrupt

### Search History

DATE: Monday, March 27, 2006 [Printable Copy](#) [Create Case](#)

#### Set Name Query

side by side

#### Hit Count Set Name

result set

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

<u>L14</u>	L12 and (epinephrine or adrenaline)	29	<u>L14</u>
<u>L13</u>	L12 and epinephrine	20	<u>L13</u>
<u>L12</u>	L10 and inhal\$	628	<u>L12</u>
<u>L11</u>	L10 and (inhal\$ near particle)	3	<u>L11</u>
<u>L10</u>	sodium adj tartrate	4525	<u>L10</u>
<u>L9</u>	L8 and ((spray adj (dry or dried)) near10 particle)	7	<u>L9</u>
<u>L8</u>	leucine near20 (amorphous or crystalline)	107	<u>L8</u>

DB=USPT; PLUR=YES; OP=OR

<u>L7</u>	Weers	178	<u>L7</u>
<u>L6</u>	Weers near5 Jeffrey	0	<u>L6</u>
<u>L5</u>	Weers near2 Jeffrey	0	<u>L5</u>

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR

<u>L4</u>	L3 and (spray adj (dry or dried))	29	<u>L4</u>
<u>L3</u>	L2 and ((find adj particle adj fraction) or FPF)	77	<u>L3</u>

L2 (epinephrine or adrenaline or corticosteroid)

28844 L2

*DB=USPT; PLUR=YES; OP=OR*

L1 6423344.pn.

1 L1

END OF SEARCH HISTORY

FILE 'CAPLUS, MEDLINE' ENTERED AT 10:51:42 ON 27 MAR 2006

L2 1 S (EPINEPHRINE OR ADRENALINE) (10A) (SPRAY(W) (DRY OR DRIED))  
L3 126764 S (EPINEPHRINE OR ADRENALINE)  
L4 985 S (SPRAY (W) (DRY OR DRIED OR DRYING)) (10A) PARTICLE  
L5 0 S L4 AND (LEUCINE (5A) (AMORPHOUS OR CRYSTALLINE))  
L6 0 S L4 AND (LEUCINE (10A) (AMORPHOUS OR CRYSTALLINE))  
L7 12 S L4 AND LEUCINE  
L8 6 S L3 AND (SODIUM (W) TARTRATE)

L7 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN

TI The influence of formulation components on the aerosolization properties of spray-dried powders

AB Dry powders suitable for inhalation containing  $\beta$ -estradiol, leucine as a dispersibility enhancer and lactose as a bulking agent were prepared by spray-drying from aqueous ethanol formulations. The influence of formulation components on the characteristics of the resultant spray-dried powders was examined through the use of a range of ethanol concns. (10-50% volume/volume) in the solvent used to prepare the initial formulations. Addnl., the amount of leucine required to act as a dispersibility enhancer was investigated by varying the amount of leucine added to the formulation prior to spray-drying. Following spray-drying, resultant powders were characterized using SEM, laser diffraction and tapped d. measurements, and the aerosolization performance determined using Twin Stage Impinger and Andersen Cascade Impactor anal. The authors demonstrate that selection of appropriate solvent systems and leucine concentration allows the preparation of spray-dried powders that display enhanced aerosolization properties, and would be predicted to exhibit high deposition in the lower regions of the respiratory tract.

ACCESSION NUMBER: 2005:1266843 CAPLUS

DOCUMENT NUMBER: 144:156362

TITLE: The influence of formulation components on the aerosolization properties of spray-dried powders

AUTHOR(S): Rabbani, Naumana R.; Seville, Peter C.

CORPORATE SOURCE: Inhalation Technology Research Team, School of Life and Health Sciences, Aston University, Birmingham, B4 7ET, UK

SOURCE: Journal of Controlled Release (2005), 110(1), 130-140  
CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2006 ACS on STN

TI Enhanced Dispersibility and Deposition of Spray-dried Powders for Pulmonary Gene Therapy

AB Spray-drying represents a viable alternative to freeze-drying for preparing dry powder dispersions for delivering macromols. to the lung. The dispersibility of spray-dried powders is limited however, and needs to be enhanced to improve lung deposition and subsequent biol. activity. In this study, we investigate the utility of leucine as a dry powder dispersibility enhancer when added prior to spray-drying a model non-viral gene therapy formulation (lipid:polycation:pDNA, LPD). Freeze-dried lactose-LPD, spray-dried lactose-LPD and spray-dried leucine-lactose-LPD powders were prepared SEM showed that leucine increased the surface roughness of spray-dried lactose particles. Particle size anal. revealed that leucine -containing spray-dried powders were unimodally dispersed with a mean particle diameter of 3.12  $\mu$ m. Both gel electrophoresis and in vitro cell (A549) transfection showed that leucine may compromise the integrity and biol. functionality of the gene therapy vector. The deposition of the leucine containing powder was however significantly enhanced as evidenced by an increase in gene expression mediated by dry powder collected at lower stages of a multistage liquid impinger (MSLI). Further studies are required to determine the

potential of leucine as a ubiquitous dispersibility enhancer for a variety of pulmonary formulations.

ACCESSION NUMBER: 2004:317015 CAPLUS

DOCUMENT NUMBER: 141:212537

TITLE: Enhanced Dispersibility and Deposition of Spray-dried

	Powders for Pulmonary Gene Therapy
AUTHOR(S):	Li, Hao-Ying; Neill, Helen; Innocent, Rebecca; Seville, Peter; Williamson, Ian; Birchall, James C.
CORPORATE SOURCE:	Welsh Sch. Pharmacy, Cardiff Univ., Cardiff, CF10 3XF, UK
SOURCE:	Journal of Drug Targeting (2003), 11(7), 425-432 CODEN: JDTAEH; ISSN: 1061-186X
PUBLISHER:	Taylor & Francis Ltd.
DOCUMENT TYPE:	Journal
LANGUAGE:	English
REFERENCE COUNT:	42

THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

FILE 'CAPLUS, MEDLINE' ENTERED AT 10:51:42 ON 27 MAR 2006

L2 1 S (EPINEPHRINE OR ADRENALINE) (10A) (SPRAY(W) (DRY OR DRIED))  
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L6 0 S L4 AND (LEUCINE (10A) (AMORPHOUS OR CRYSTALLINE))  
L7 12 S L4 AND LEUCINE

=> d L2 IBIB

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1943:40400 CAPLUS

DOCUMENT NUMBER: 37:40400

ORIGINAL REFERENCE NO.: 37:6403g-h

TITLE: The spray drying of pharmaceutical products. III.  
Digitalis, adrenaline and ascorbic acid

AUTHOR(S): Bullock, Kenneth; Lightbrown, J. W.; McDonald, A. D.

SOURCE: Chemist and Druggist (1943), 140, 148

CODEN: CHDRA3; ISSN: 0009-3033

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

L8 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Inhalable drug delivery particles comprising epinephrine and method of uses  
 AB The present invention is directed toward particles for delivery of epinephrine to the respiratory system and methods for treating a patient in need of epinephrine. The particles and respirable compns. comprising the particles of the present invention described herein comprise the bioactive agent epinephrine, or a salt thereof, as a therapeutic agent. The particles are preferably formed by spray drying. Preferably, the particles and the respirable compns. are substantially dry and are substantially free of propellants. In a preferred embodiment, the particles have aerodynamic characteristics that permit targeted delivery of epinephrine to the site(s) of action.

ACCESSION NUMBER: 2004:331569 CAPLUS  
 DOCUMENT NUMBER: 140:344875  
 TITLE: Inhalable drug delivery particles comprising epinephrine and method of uses  
 INVENTOR(S): Batycky, Richard P.; Caponetti, Giovanni; Childs, Mariko; Ehrich, Elliot; Fu, Karen; Hrkach, Jeffrey S.; Li, Wen-I.; Lipp, Michael M.; Pan, Mei-Ling; Summa, Jason  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 60 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004076588	A1	20040422	US 2003-607571	20030626
CA 2488976	AA	20040108	CA 2003-2488976	20030626
WO 2004002551	A2	20040108	WO 2003-US20166	20030626
WO 2004002551	A3	20040812		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 1531794 A2 20050525 EP 2003-742233 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:				
			US 2002-393007P	P 20020628
			US 2002-393716P	P 20020702
			US 2002-425349P	P 20021108
			WO 2003-US20166	W 20030626

L8 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Encapsulation of sensitive liquid components into a matrix to obtain discrete shelf-stable particles  
 AB A liquid encapsulant component which contains an active, sensitive encapsulant, such as a live microorganism or an enzyme dissolved or dispersed in a liquid plasticizer is admixed with a plasticizable matrix material. The matrix material is plasticizable by the liquid plasticizer and the encapsulation of the active encapsulant is accomplished at a low temperature and under low shear conditions. The active component is encapsulated and/or embedded in the plasticizable matrix component or

material in a continuous process to produce discrete, solid particles. The liquid content of the liquid encapsulant component provides substantially all or completely all of the liquid plasticizer needed to plasticize the matrix component to obtain a formable, extrudable, cuttable, mixture or dough. Removal of liquid plasticizer prior to extrusion is not needed to adjust the viscosity of the mixture for formability. Release of an active component from the matrix may be delayed or controlled over time so that the active component is delivered when and where it is needed to perform its intended function. Controlled release, discrete, solid particles which contain an encapsulated and/or embedded component such as a heat sensitive or readily oxidizable pharmaceutically, biol., or nutritionally active component are continuously produced without substantial destruction of the matrix material or encapsulant.

ACCESSION NUMBER: 2000:259972 CAPLUS  
DOCUMENT NUMBER: 132:293042  
TITLE: Encapsulation of sensitive liquid components into a matrix to obtain discrete shelf-stable particles  
INVENTOR(S): Van Lengerich, Bernhard H.  
PATENT ASSIGNEE(S): General Mills, Inc., USA  
SOURCE: PCT Int. Appl., 56 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021504	A1	20000420	WO 1999-US20905	19991006
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2345815	AA	20000420	CA 1999-2345815	19991006
AU 9963872	A1	20000501	AU 1999-63872	19991006
AU 777977	B2	20041104		
EP 1119345	A1	20010801	EP 1999-951433	19991006
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002527375	T2	20020827	JP 2000-575480	19991006
PRIORITY APPLN. INFO.:			US 1998-103700P	P 19981009
			US 1998-109696P	P 19981124
			US 1999-233443	A 19990120
			WO 1999-US20905	W 19991006

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Embedding and encapsulation of controlled release particles  
AB Controlled release, discrete, solid particles which contain an encapsulated and/or embedded component such as a heat sensitive or readily oxidizable pharmaceutically, biol., or nutritionally active component are continuously produced without substantial destruction of the matrix material or encapsulant. A release-rate controlling component is incorporated into the matrix to control the rate of release of the encapsulant from the particles. The addnl. component may be a hydrophobic component or a high water binding capacity component for extending the release time. The plasticizable matrix material, such as starch, is admixed with at least one plasticizer, such as water, and at least one



release-rate controlling component under low shear mixing conditions to plasticize the plasticizable material without substantially destroying the at least one plasticizable material and to obtain a substantially homogeneous plasticized mass. The plasticizer content is substantially reduced and the temperature of the plasticized mass is substantially reduced prior to admixing the plasticized mass with the encapsulant to avoid substantial destruction of the encapsulant and to obtain a formable, extrudable mixture. The mixture is extruded through a die without substantial or essentially no expansion and cut into discrete, relatively dense particles. Release properties may also be controlled by precoating the encapsulant and/or coating the extruded particles with a film-forming component. An example of encapsulation of acetylcysteine is given using starch, polyethylene, glycerol monostearate, and vegetable oil.

ACCESSION NUMBER: 1998:293427 CAPLUS  
DOCUMENT NUMBER: 129:8597  
TITLE: Embedding and encapsulation of controlled release particles  
INVENTOR(S): Van Lengerich, Bernhard H.  
PATENT ASSIGNEE(S): Van Lengerich, Bernhard H., USA  
SOURCE: PCT Int. Appl., 63 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9818610	A1	19980507	WO 1997-US18984	19971027
W: AU, CA, JP, NO, PL, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2269806	AA	19980507	CA 1997-2269806	19971027
CA 2269806	C	20060124		
AU 9749915	A1	19980522	AU 1997-49915	19971027
AU 744156	B2	20020214		
EP 935523	A1	19990818	EP 1997-912825	19971027
EP 935523	B1	20040929		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002511777	T2	20020416	JP 1998-520558	19971027
EP 1342548	A1	20030910	EP 2003-10031	19971027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 277739	E	20041015	AT 1997-912825	19971027
NO 9902036	A	19990428	NO 1999-2036	19990428
PRIORITY APPLN. INFO.:			US 1996-29038P	P 19961028
			US 1997-52717P	P 19970716
			EP 1997-912825	A3 19971027
			WO 1997-US18984	W 19971027
REFERENCE COUNT:	5	THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L8 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
TI FIA-fluorimetric determination of **adrenaline** in pharmaceutical formulations by oxidation with molecular oxygen  
AB The fluorimetric determination of **adrenaline** is carried out in a continuous-flow assembly and by the mol. dissolved oxygen. The sample solution merges with an NaOH stream, then the resulting mixture is heated at 73° and led to the flow-cell of the fluorimeter. The flow-assembly is very simple and the procedure is quick (107 samples h-1) reproducible (R.S.D. 0.6%), selective, and suitable to be applied to determination of **adrenaline** in formulations. Calibrations graph are linear over the ranges 0.05-15 and 20-40 mg/L.  
ACCESSION NUMBER: 1998:45014 CAPLUS

DOCUMENT NUMBER: 128:80086  
 TITLE: FIA-fluorimetric determination of adrenaline  
 in pharmaceutical formulations by oxidation with  
 molecular oxygen  
 AUTHOR(S): Canoves Torres, A.; Mellado Romero, A.; Martinez  
 Calatayud, J.  
 CORPORATE SOURCE: Dep. Quimica Analitica, Univ. Valencia, Moncada,  
 E-46113, Spain  
 SOURCE: Mikrochimica Acta (1998), 128(3/4), 187-190  
 CODEN: MIACAQ; ISSN: 0026-3672  
 PUBLISHER: Springer-Verlag Wien  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

L8 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Cleaning compositions for soft and hard contact lenses  
 AB The title compns. comprise a suspension of particles of a water-soluble  
 compound in a predominantly nonaq., water-miscible organic liquid medium which  
 does not dissolve the particles. The compns. are rubbed onto soiled  
 contact lenses to remove contaminants, including proteinaceous materials,  
 and the cleaned lenses are rinsed with water which dissolves the particles  
 and removes all the residue, eliminating any potential eye irritants from  
 the lenses. A cleaning composition comprised a suspension of 20 g sucrose  
 (particle size 100  $\mu$ ) in a mixture of water 50, Tween 80 50, and Tween 20  
 50 mL.

ACCESSION NUMBER: 1988:23756 CAPLUS  
 DOCUMENT NUMBER: 108:23756  
 TITLE: Cleaning compositions for soft and hard contact lenses  
 INVENTOR(S): Winterton, Lynn; Su, Kai Chiang  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 8 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 240464	A1	19871007	EP 1987-810185	19870330
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4734222	A	19880329	US 1986-847986	19860403
AU 8770933	A1	19871008	AU 1987-70933	19870401
DK 8701679	A	19871004	DK 1987-1679	19870402
BR 8701504	A	19880119	BR 1987-1504	19870402
JP 62242916	A2	19871023	JP 1987-81302	19870403
PRIORITY APPLN. INFO.:			US 1986-847986	A 19860403

L8 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Methods of preparing isotonic solutions by means of graphs or tables on  
 the basis of experimentally found iso-osmotic values  
 AB Four graphical and three tabular methods for preparing isotonic aqueous solns.  
 are described. New exptl. data is presented for 353 compds. to be used  
 for the recommended and most practical of the methods studied for  
 isotonicity adjustment. All the methods described may be used in  
 practical pharmacy. The graphical methods are more accurate but consume  
 more space than the tabular methods.  
 ACCESSION NUMBER: 1961:50734 CAPLUS  
 DOCUMENT NUMBER: 55:50734  
 ORIGINAL REFERENCE NO.: 55:9783c-d  
 TITLE: Methods of preparing isotonic solutions by means of  
 graphs or tables on the basis of experimentally found  
 iso-osmotic values  
 AUTHOR(S): Hammarlund, E. R.; Larsen, J.; Pedersen-Bjergaard, K.

CORPORATE SOURCE: Univ. of Washington, Seattle  
SOURCE: Pharmaceutica Acta Helvetiae (1960), 35, 593-607  
CODEN: PAHEAA; ISSN: 0031-6865  
DOCUMENT TYPE: Journal  
LANGUAGE: English